

CLAIMS

1. A gas purging device for metallurgical melting vessels with the following characteristics:
 - 1.1 a gas purging brick (12) is arranged in an upper cylindrical receptacle (18) with its end (12o) on the gas outlet side and in a lower cylindrical receptacle (10) with its adjacent section (12u), and
 - 1.2 an annular space provided at least between the lower receptacle (10) and the gas purging brick (12) is filled with a mass (16), wherein
 - 1.3 the gas purging brick (12), the receptacles (10, 18) and the mass (16) are made of a refractory ceramic material.
2. The gas purging device according to Claim 1, the gas purging brick (12) of which is arranged in the upper receptacle (18) flush or with slight clearance.
3. The gas purging device according to Claim 1, the gas purging brick (12) of which extends over the entire height of the lower and the upper receptacle (10, 18).
4. The gas purging device according to Claim 1, the gas purging brick (12) of which has a circular cross section.

5. The gas purging device according to Claim 1, wherein at least one receptacle (10, 18) is realized in the form of a pressed part.
6. The gas purging device according to Claim 1, the gas purging brick (12) of which has a directed porosity.
7. The gas purging device according to Claim 1, the gas purging brick (12) of which comprises several small metal or ceramic tubes (20) that extend in the axial direction and serve for achieving a directed porosity.
8. The gas purging device according to Claim 1, the upper receptacle (18) of which is at least as long as the lower receptacle (10).
9. The gas purging device according to Claim 1, the upper receptacle (18) of which is 1.1-times to 10-times as long as the lower receptacle (10).
10. The gas purging device according to Claim 1, the upper receptacle (18) of which is 2-times to 3-times as long as the lower receptacle (10).
11. The gas purging device according to Claim 1, the upper receptacle (18) of which has an outside cross section that is larger than the inside cross section of the lower receptacle (10).

12. The gas purging device according to Claim 1, wherein the upper receptacle (18) lies on the lower receptacle (10).
13. The gas purging device according to Claim 1, the upper receptacle (18) of which has an outside cross section that is smaller than the outside cross section of the lower receptacle (10).
14. The gas purging device according to Claim 1, wherein the upper receptacle (18) protrudes into the lower receptacle (10).
15. The gas purging device according to Claim 1, the mass (16) of which is a ramming mass.
16. The gas purging device according to Claim 1, wherein at least one of the receptacles (10, 18) comprises more than one part.
17. Use of a gas purging device according to one of Claims 1-16 for installation in the bottom (H) of a metallurgical melting vessel.
18. Use of a gas purging device according to one of Claims 1-16 for installation in the hearth bottom (H) of an electric furnace.